COOPERATIVE AGREEMENT FOR SITE INVESTIGATION AND REMEDIATION

BETWEEN THE STATE OF LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AND

MOTIVA ENTERPRISES LLC

IN THE MATTER OF

THE BAYOU TREPAGNIER SITE

AI # 44765

I. PARTIES

The Louisiana Department of Environmental Quality (hereinafter "LDEQ"), and Motiva Enterprises LLC (hereinafter "Motiva"), by the signature of their duly authorized and empowered agents, agree to the terms and conditions of this Agreement.

II. AUTHORITY

This Agreement is entered into pursuant to the authority vested in LDEQ under provisions of the Louisiana Environmental Quality Act, La. R.S. 30:2001, *et seq*. The activities conducted pursuant to this Agreement are subject to acceptance by LDEQ.

III. OBJECTIVES

In entering into this Agreement, the mutual objectives of the LDEQ and Motiva are to: 1) complete a Remedial Design and Remedial Action of the Upper Reach (Operable Unit 1) of the Bayou Trepagnier Site (hereinafter "the Site"); 2) complete a Site Investigation that includes an updated Human Health and Ecological Risk Assessment to address contaminants-of-concern (COCs) that may be present in sediments, dredge spoils, and adjacent soils in the Middle and Lower Reach (Operable Unit 2 or OU2) and sediments, dredge spoils, and adjacent soils that are not included in the remedial action for the Upper Reach (Operable Unit 1 or OU1) under the requirements found in the Louisiana Administrative Code ("LAC") 33:I, Chapter 13, the Risk Evaluation/Corrective Action Program (hereinafter RECAP).

IV. SITE LOCATION

The Site consists of a Bayou approximately 15,500 feet in length, extending from the Hurricane Protection Levee (HPL) northward to its confluence with Bayou LaBranche and is located north of Norco, St. Charles Parish, Louisiana. The Site is bordered by its confluence with Bayou LaBranche to the north, the HPL to the south, Bayou LaBranch wetlands to the east, and Engineer's Canal to the west.

V. SITE BACKGROUND

Bayou Trepagnier is located to the east of the Bonnet Carré lower guide levee, north of Airline Highway (U.S. 61) near Norco, approximately 10 miles west of New Orleans. The New Orleans Refining Company (NORCO) facility initiated refining operations in 1920. The town that surrounded the facility adopted the facility acronym as its name. From 1920 to 1929 wastewater and storm water from NORCO and other industries around the facility, as well as from the town, were discharged to the Bayou.

Shell Petroleum Corporation (Shell) purchased and began operating the refinery in 1929. In 1930 the United States Army Corps of Engineers (USACE) constructed a spillway at Bonnet Carré, just upstream from Norco. The spillway's lower guide levee extends from the river to Lake Pontchartrain, eliminating the upper portion of the Bayou. The NORCO facility historically discharged to the man-made canal leading to Bayou Trepagnier beginning in the mid-1930s. The Louisiana Department of Public Works dredged the canal and Bayou Trepagnier in 1951. Dredged sediments were placed in spoils banks, primarily along the west side of the Bayou. The refinery ceased discharge into the Bayou in 1995. Motiva Enterprises, LLC (Motiva) has owned and operated the facility since 1998. COCs identified for the Bayou include lead, individual polycyclic aromatic hydrocarbons (PAHs), chromium, zinc, and copper.

Bayou Trepagnier extends approximately 15,500 feet northward from the Hurricane Protection Levee (HPL) to its confluence with Bayou LaBranche. The width of the Bayou varies from approximately 25 to 60 feet, being generally narrower in its upper reach and wider in portions of the lower reach. Bayou LaBranche flows northwesterly for about one mile from its junction with Bayou Trepagnier before emptying into Lake Pontchartrain. A man-made canal connects Engineer's Canal to Bayou LaBranche, entering Bayou LaBranche south of the Interstate 10/Bayou LaBranche cross-over.

The Bayou is hydrologically connected to the adjacent wetland. Flow in the Bayou is dominated by tidal and wind-driven water level fluctuations in Lake Pontchartrain. Water in the Bayou is fresh to mildly brackish. The Bayou is divided into three reaches:

- The Upper Reach—extends approximately 5,500 feet from the HPL northward to a narrow "Cut" which connects the Bayou to Engineer's Canal; a part of this reach is a man-made canal;
- The Middle Reach—extends approximately 5,500 feet from the Cut northward; and

• The Lower Reach—extends about 4,500 feet from the north end of the Middle Reach to Bayou LaBranche.

For ease of reference, the Bayou is divided in Stations representing approximate 100 foot segments along the centerline of the Bayou beginning with the HPL and running northward to the Bayou LaBranche confluence.

The Bayou banks are covered with typical second-growth wetland forest. Cypress-Tupelo swamp, marsh, and open water areas exist between Bayou Trepagnier and Bayou LaBranche. Articles appear occasionally in the popular press on recreational use of the Bayou by canoe or small boat for birding, wildlife observation, and photography. Public access to Bayou Trepagnier is restricted to small boat transport. Small motorized jon boats can be launched at Engineer's Canal near the man-made canal connecting to Bayou LaBranche. Canoes can be launched at many points along Engineer's Canal, including across from the Cut. The only land access to Bayou Trepagnier is via the HPL, from which the public is excluded.

The Bayou is part of the LaBranche wetlands, and is designated a Louisiana Natural and Scenic Stream, and is within the coastal zone delineation and therefore regulated under Louisiana State and Local Coastal Resources Management Act of 1978. Proposed construction activities and land-use changes must be approved by the Louisiana Department of Natural Resources – Coastal Management Division (LDNR-CMD).

Previous investigations and risk assessments characterized constituents of concern (COCs) and risks associated with current human and ecological exposure scenarios. These studies found concentrations of several COCs above typical background concentrations (e.g., lead, chromium, zinc, and individual polycyclic aromatic hydrocarbons [PAHs]) in Bayou Trepagnier sediments and surrounding soils. Since January 2000, a cooperative Work Group consisting of Motiva and various federal and state agencies, together with local non-governmental organizations has worked to address the risk levels in the context of special regional restoration needs, and to develop a comprehensive approach to remediation, natural resource damage assessment (NRDA)-driven restoration, and long - term regional wetland restoration efforts.

Motiva prepared a Feasibility Study (FS) with subsequent supplements to describe criteria and requirements for selecting alternative remedies, evaluating supplemental remedial alternatives, and recommending remedial action. The October 2006 FS Supplement II Upper Reach (Operable Unit 1) addresses the requirement for a Corrective Action Study (CAS) Report under the LDEQ's Inactive and Abandoned Sites (IAS) Regulations, Louisiana Administrative Code (LAC) 33:VI.509.C.

A draft Decision Document of the Final Remedy of the Upper Reach (Operable Unit 1) of Bayou Trepagnier was written by LDEQ and proposed for public comment. After receiving public comments and incorporating modifications to the document, the Decision Document was signed in August 2007. The Decision Document addresses remediation of sediments in Operable Unit 1 and includes a requirement to perform additional investigation work for sediments, dredge spoils, and adjacent soils in the Middle and Lower Reach (Operable Unit 2 or OU2) and sediments, dredge spoils, and adjacent soils that are not included in the remedial action for the Upper Reach (Operable Unit 1 or OU1).

VI. WORK TO BE PERFORMED

It is hereby AGREED that Motiva shall perform the work described in this Section. (All deadlines may be extended by agreement of the parties.):

A. OU2 Site Investigation

- 1) Prepare and submit a Work Plan for the assessment of OU2 under RECAP Management Option-3 (MO-3) (hereinafter "OU2 Work Plan"), meeting the requirements of LAC 33:VI.507.C.1 and Section IX below, for LDEQ review and approval within seventy-five (75) calendar days of the effective date of this Agreement. The OU2 Work Plan shall address the sediments, dredge spoils, and adjacent soils in the Middle and Lower Reach (OU2) and sediments, dredge spoils, and adjacent soils that are not included in the remedial action for the Upper Reach (OU1). All sampling proposed in the OU2 Work Plan shall supply data necessary for the Updated Human Health and Ecological Risk Assessment and build upon data already collected in previous site investigations. The OU2 Work Plan shall include an Updated Human Health and Ecological Risk Assessment Work Plan as a sub-plan and meet the requirements found in the Louisiana Administrative Code ("LAC") 33:I, Chapter 13, the Risk Evaluation/Corrective Action Program (hereinafter RECAP).
- 2) Begin implementation of the OU2 Work Plan within sixty (60) calendar days of receiving LDEQ approval in accordance with the approved activity schedule.
- 3) Submit a MO-3 RECAP Report for OU2 meeting the requirements of LAC 33:VI.507.C.4 and Section IX below, for LDEQ approval within one hundred twenty (120) calendar days of the completion of all site work required by the approved OU2 Work Plan.

B. OU1 Remedial Design and Remedial Action

- Within one-hundred twenty (120) calendar days of the effective date of this Agreement, submit a Remedial Design (RD) for OU1 that will successfully implement the Final Remedy for the Upper Reach of Bayou Trepagnier (OU1) as described in the Decision Document issued by the administrative authority on August 6, 2007. This OU1 Remedial Design shall include closure of the small "cut" between Bayou Trepagnier and Engineer's Canal as a means of reducing cross flow of brackish water from Engineer's Canal and potential migration of COCs between the two channels.
- 2) Within sixty (60) calendar days of the LDEQ approval of the OU1 Remedial Design, Motiva shall submit, for LDEQ review and approval, a Remedial Project Plan meeting the requirements of LAC 33:VI.513.B and Section IX below, designed to reduce the mass, toxicity, mobility, volume or

concentration of contaminants of the Upper Reach of Bayou Trepagnier. A Cap Monitoring Plan shall be included as part of the Remedial Project Plan and will address monitoring objectives, relationship to risk control, rationale for the monitoring components, and approaches, triggers, location, frequency, and parameters for monitoring.

- 3) Within sixty (60) calendar days of the LDEQ approval of the Remedial Project Plan for OU1, Motiva shall begin implementation of this plan in accordance with the approved activity schedule.
- Within sixty (60) calendar days of the completion of the remedial action for OU1, Motiva shall submit a Final Remedy Report. This report shall include detailed as-built drawings of the completed remedial action, a description of the completed remedial action, and Operation and Maintenance (O&M) Plan.
- 5) Motiva shall submit three copies of each plan, report, and other document submitted to LDEQ pursuant to this Agreement.

VII. QUALIFIED PROFESSIONALS

All work performed pursuant to this Agreement shall be under the direction and supervision of a qualified professional with expertise in environmental site investigation, risk evaluation and/or remediation. Prior to the initiation of work under this Agreement, Motiva shall notify LDEQ in writing regarding the name, title, and qualifications of such professionals and any contractors and/or principal subcontractors to be used in carrying out the terms of this Agreement.

VIII. DESIGNATED PROJECT MANAGERS

Within fifteen (15) calendar days after the effective date of this Agreement, LDEQ and Motiva shall each designate a Project Manager ("PM"). Each party will notify the other in writing if it changes its PM. Each Project Manager shall be responsible for overseeing the implementation of this Agreement. To the maximum extent possible, communications between Motiva and LDEQ and all documents, including work plans, reports, and correspondence, shall be directed through the Project Managers, as appropriate.

The responsibility of the LDEQ PM or his representative will be to observe and review all aspects of the work of the remediation contractor to ensure that all work is performed in accordance with the Work Plan(s), this Cooperative Agreement, the Louisiana Environmental Quality Act, RECAP, and all applicable regulations.

The LDEQ Secretary or his designee shall have the authority to halt, conduct or direct any tasks required by this Agreement and/or any response actions or portions thereof when conditions present an immediate risk to public health or welfare or the environment. To the maximum extent feasible, LDEQ shall allow Motiva to take any response action required pursuant to this clause.

The absence of the Project Managers from the Site shall not be cause for the stoppage of work.

IX. MINIMUM REQUIREMENTS FOR WORK PLAN(S)

A. OU2 MO-3 Assessment

- The OU2 Work Plan referenced in Section VI shall include all aspects of the project including sampling and analysis and Site health and safety. **Standard operating procedures should be referenced and not duplicated in the OU2 Work Plan.** The OU2 Work Plan shall include elements prescribed in Section 6.2 Management Option 3 Work Plan of the 2003 RECAP.
- 2. The MO-3 RECAP Report for OU2 shall meet the submittal requirements of Section 6.9 Management Option 3 Submittal Requirements of the 2003 RECAP. For each AOI to be managed under RECAP MO-3, Motiva shall develop the Remediation standard(s) for LDEQ approval. This submittal shall meet all requirements of Section 6.8 of RECAP.
- 3. The sampling and analysis portion of the OU2 Work Plan shall specify all activities necessary to obtain all data to adequately characterize the surface and subsurface at the Site. The OU2 Work Plan shall clearly state sampling objectives and their relevance to the Conceptual Site Model; necessary equipment; sample types, locations, and frequency; and analyses of interest. Sampling, analysis, data management, and data validation must be conducted in accordance with Section 2.0 General Conditions of the 2003 RECAP.

B. OU1 Remedial Design and OU1 Final Remedy

- 1. The OU1 Remedial Design shall identify and provide an overall project design concept for the Final Remedy. The OU1 Remedial Design shall:
 - a. Identify data gaps for completing the detailed Remedial Design plans and specifications.
 - b. Provide a schedule that includes collection of data specific to the Remedial Design.
 - c. Provide a discussion of permitting requirements for the implementation of the Final Remedy.
 - d. Provide a discussion of access agreements that will be required for the implementation of the Final Remedy.
 - e. Include closure of the small "cut" between Bayou Trepagnier and Engineer's Canal.
 - f. Include closure of the Upper Reach of Bayou Trepagnier.
 - g. Include preliminary plans for treatment of stormwater and other remedial action derived waste, if any.

- 2. The Remedial Project Plan for OU1 shall identify and design the remedy to be implemented. The work plan shall include the tasks, specifications, and subplans necessary for the implementation of the OU1 Remedial Design, including construction and operation of the Final Remedy. **Standard operating procedures should be referenced and not duplicated in the OU1 Work Plan.** The minimum requirements of the plan include:
 - a. A Remedial Action Work Plan, including:
 - i) A general description of the work to be performed and a summary of the engineering design criteria;
 - ii) Maps showing the general location of the Site and the existing conditions of the facility;
 - iii) Detailed plans and procedural and material specifications necessary for the construction of the remedy;
 - iv) Specific quality control tests to be performed to document the construction of the remedy, including:
 - 1. Specifications for the testing or reference to specific testing methods;
 - 2) Frequency of testing; and
 - 3) Results of testing.
 - b. A sampling and analysis plan; and
 - c. A project implementation schedule.
- 3. The Post Final Remedy Operation and Maintenance Plan(s) for OU1 shall include the following:
 - a. The name, telephone number, and address of the person responsible for the operation and maintenance of the Site;
 - b. A description of all operation and maintenance tasks and specifications;
 - c. All design and construction plans;
 - d. Any applicable equipment diagrams, specifications, and manufacturer's guidelines;
 - e. An operation and maintenance schedule;
 - f. A site-specific health and safety plan; and
 - g. Other information as requested by the department.
- 4. The Post Final Remedy Cap Monitoring Plan(s) for OU1 shall include the following:
 - a. The location of monitoring points;

- b. Inspection requirements for monitoring of CAP condition;
- d. A monitoring schedule;
- e. Monitoring methodologies to be used (including sample collection procedures and laboratory methodology, if applicable);
- f. Provisions for quality assurance and quality control;
- g. Data presentation and evaluation methods;
- h. A contingency plan to address ineffective monitoring; and
- i. Provisions for reporting to the department on a semi-annual basis for the first three years after completion of the remedy, and annually thereafter, unless DEQ determines that a different reporting schedule is appropriate, and notifies Motiva of such. The reports shall include, at a minimum:
 - 1. the findings from the previous period;
 - 2. an explanation of any anomalous or unexpected results;
 - 3. an explanation of any results that are not in compliance with the monitoring goals; and
 - 4. proposals for correcting any non-compliance.
- 5. The Final Remedy Project Plan(s) shall address site health and safety, delineating all necessary precautions for the safety of personnel, and shall address the necessary protection to prevent damage, injury or loss to personnel involved in site activities and the surrounding community during the implementation of all Site work under the approved Work Plans. This portion of the Work Plan(s) must provide a Site background discussion and describe personnel responsibilities, protective equipment, health and safety procedures and protocols, decontamination procedures, personnel training, and type and extent of medical surveillance. This portion must identify problems or hazards that may be encountered and how they are to be addressed. Procedures for protecting third parties, such as visitors or the surrounding community, must also be provided.

X. LDEQ COMMENTING ON SUBMITTED DOCUMENTS

LDEQ shall review and provide written comments on the Work Plan(s) and reports (except progress reports) prepared by Motiva within a reasonable time. LDEQ shall notify Motiva in writing of LDEQ's comments on these documents or any part thereof. Within thirty (30) calendar days of receipt of such comments, Motiva shall either amend and submit to LDEQ the revised Work Plan(s)/reports or notify LDEQ in writing of the reasons for not adopting LDEQ's revisions. In the event that LDEQ is not satisfied that the revisions are responsive to the LDEQ comments, LDEQ may either elaborate on the comments or issue a notice of nonacceptance.

The time periods for action provided in Section VI, this section, and Section XV may be extended by mutual written consent of the LDEQ and Motiva.

XI. QA/QC AND DATA VALIDATION/EVALUATION

Analytical results shall not be accepted at face value. Limitations and uncertainties associated with the data shall be identified so that only data that are appropriate and reliable for use in quantitative risk assessment are carried through the RECAP process. Data shall be collected and reviewed for quality assurance/quality control in accordance with Section 2.4 Data Quality Assurance/Quality Control Requirements of the 2003 RECAP. All data shall be evaluated with respect to analytical method, sample quantitation limits, data qualifiers and codes, and blank sample results in accordance with Section 2.5 Data Evaluation and Data Usability of the 2003 RECAP.

Motiva will develop a data management system including field logs, sample management and tracking procedures, and document control and inventory procedures for both laboratory data and field measurements to ensure that the collected data is of adequate quality and quantity.

Motiva will ensure that collected data has been validated at the appropriate field or laboratory QA/QC level to determine whether it is appropriate for its intended use. Such validation procedures shall be conducted in accordance with guidelines established by the U.S. Environmental Protection Agency (USEPA). Validation shall include such procedures to assess data precision, representativeness, comparability, accuracy, and completeness of specific measurement parameters.

One copy of a summary report of all analytical data shall be submitted to the LDEQ with any investigation report. The summary report shall, at a minimum, meet the requirements of Section 2.5 Data Evaluation and Data Usability of the 2003 RECAP. If requested, Motiva shall provide LDEQ with a fully supported data package within twenty (20) calendar days of the request.

XII. SAMPLING/ANALYSIS, ACCESS AND DATA AVAILABILITY

Motiva shall make available to LDEQ the results of all sampling and/or tests or other data generated by Motiva in implementing this Agreement. Upon written request by LDEQ, Motiva shall submit any data to LDEQ within ten (10) calendar days.

LDEQ shall make available to Motiva the results of sampling and/or tests or other data generated by LDEQ.

Motiva shall notify LDEQ not less than five (5) business days in advance of any planned sample collection activity and as soon as possible of any unplanned or emergency sample collection activity. At the request of LDEQ, Motiva shall allow split or duplicate samples to be taken by LDEQ and/or its authorized representatives of any samples collected by Motiva, or on Motiva's behalf, pursuant to the implementation of this Agreement.

LDEQ shall notify Motiva not less than five (5) business days in advance of any planned sample collection activity and as soon as possible of any unplanned or emergency sample collection activity. At the request of Motiva, LDEQ shall allow split or duplicate samples to be taken by Motiva of any samples collected by LDEQ during the performance of the work associated with this Agreement.

XIII. SITE ACCESS AND DOCUMENT AVAILABILITY

Motiva shall notify LDEQ at least five (5) business days prior to the initiation of any field work. Further, Motiva shall grant LDEQ open access to the portions of the Site under its ownership and/or control, and provide LDEQ with an opportunity to observe all field work.

Any LDEQ employee or other authorized representative shall have the authority to enter and freely move about all property that comprises the Site and that is under Motiva's ownership and/or control for any purpose authorized by law, which includes but is not limited to: inspecting records, operating logs, and contracts related to the Site; reviewing the progress of Motiva in carrying out the terms of this Agreement; conducting such tests as LDEQ or the LDEQ PM deem necessary; using camera, sound recording, or other documentary type equipment; and verifying the data submitted to LDEQ by Motiva. When possible, LDEQ shall give Motiva reasonable notice before entry. Motiva shall permit LDEQ's authorized representatives, at LDEQ's cost, to inspect and copy all records, files, photographs, documents and other writings, including all sampling and monitoring data, in any way pertaining to work undertaken pursuant to this Agreement. All parties with access to the Site pursuant to this paragraph shall comply with the accepted health and safety plan. Furthermore, where such records and documents are maintained in a location other than on the Site, Motiva shall make such records and documents available for LDEQ review, inspection and copying upon request.

If any third party access agreements are necessary for the implementation of this Agreement, Motiva shall use its best efforts to obtain such access agreements as soon as practicable. If, despite its best efforts, Motiva is unable to obtain a necessary third party access agreement, Motiva shall so advise LDEQ and LDEQ agrees to assist in obtaining any said third party access agreements. Such agreements shall provide for access by LDEQ and/or its authorized representatives to the land subject to the access agreements. Failure by Motiva to obtain access agreements, after use of such reasonable efforts, does not constitute a breach of this Agreement. Failure by Motiva to obtain a necessary third party access agreement, after use of such reasonable efforts, shall qualify as a force majeure event pursuant to Section XXXI (FORCE MAJEURE) and the affected work at the Site will be delayed until the appropriate third party access agreement is obtained.

XIV. CHANGING SITE CONDITIONS

If conditions at the Site materially change during performance of the work specified under this Agreement, LDEQ and/or Motiva may determine that additional, different, or fewer tasks, such as further investigation work, engineering evaluation and technology, or remedial actions, are necessary. The party discovering such findings shall promptly notify the other party. Within thirty (30) calendar days of receipt of such notice, each party will

notify the other as to whether or not the Agreement should be modified to accommodate changing site conditions. Upon written agreement of the parties hereto, this Agreement may be modified as necessary to address such changing site conditions. If the parties do not agree to the inclusion of these tasks, the parties shall proceed in accordance with Section XX (Dispute Resolution) provisions.

XV. ACTIVITY SCHEDULE

The activities shall be implemented according to a schedule agreed upon by LDEQ and Motiva, unless a specific time is set forth by this Agreement. The schedule shall be delineated in the Work Plan(s) and shall, as a minimum, include a time line bar chart, supplemented with text to briefly describe each task.

XVI. STIPULATED PENALTIES

Motiva shall be liable to the LDEQ for failure to comply with the requirements of this Agreement, unless excused under Section XXXI (FORCE MAJEURE). Compliance by Motiva shall include completion of the activities specified in this Agreement and any approved Work Plans in accordance with the Agreement and/or the Work Plan and all applicable requirements of law, within the specified time schedules established pursuant to this Agreement and/or Work Plans.

Stipulated penalties shall accrue per violation per day for noncompliance with any of the following milestones:

Failure to submit OU2 Work Plan within one hundred twenty (120) calendar days of the effective date of this agreement;

Failure to implement the LDEQ approved OU2 Work Plan in accordance with the major milestones contained within the approved activity schedule;

Failure to submit a OU2 MO-3 Report within ninety (90) calendar days of the Site Investigation Report due date;

Failure to implement the OU1 Remedial Action Work Plan in accordance with the LDEQ approved major milestones contained within the activity schedule.

Stipulated penalties shall be in the following amounts:

P	enalty per Violation per Day	Number of Days of Violation
	\$500	first through 30th day
	\$1,500	31st and beyond

Following LDEQ's determination that Motiva has failed to comply with a requirement of this Agreement, LDEQ shall give Motiva written notification of the same and describe the noncompliance. In its discretion, the LDEQ may send Motiva a written demand for the payment of applicable stipulated penalties. Regardless of whether a written demand is made, penalties accrue as set forth above.

All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity or resolution of the dispute in accordance with Section XX (DISPUTE RESOLUTION).

All penalties accruing under this Section shall be due and payable to the LDEQ within 30 calendar days of Motiva's receipt from LDEQ of a demand for payment of the penalties, unless Motiva invokes the Dispute Resolution procedures under Section XX (DISPUTE RESOLUTION). All payments to the LDEQ shall be by check made payable to "Department of Environmental Quality," and mailed or delivered to the LDEQ at the address shown in Section XXVI.

The payment of penalties shall not alter in any way Motiva's obligation to complete the performance of the Work required under this Agreement.

If Motiva fails to pay stipulated penalties when due, the LDEQ may institute proceedings to collect the penalties, as well as interest. Motiva shall pay interest at the rate of eight percent (8%) annually on the unpaid balance.

Notwithstanding any other provision of this Section, the LDEQ may, in its unreviewable discretion, waive any portion of stipulated penalties that may accrue or have accrued pursuant to this Agreement.

XVII. PROGRESS REPORTS

Motiva shall provide monthly written progress reports to LDEQ according to the schedule contained in the Work Plan(s). At a minimum, these progress reports shall: (1) describe all data gathering and planning; (2) contain a status report on all field activities; and (3) include all results from sampling and analysis, and all other data received by Motiva pertinent to any work performed at the Site. Progress reports shall be submitted to LDEQ by the tenth (10th) calendar day of each month following the effective date of this Agreement.

XVIII. RECORD PRESERVATION

LDEQ and Motiva agree that they shall preserve, despite any document retention policy to the contrary, all records and documents in their possession or in the possession of their divisions, employees, agents, or contractors that contain information about the work undertaken pursuant to this Agreement at the Site, including, but not limited to, design or construction of remedial actions, and sampling, analysis, and monitoring. Documents previously supplied to LDEQ may be excluded. The document preservation requirements of this paragraph shall not apply to attorney work-product, attorney-client privileged documents, or internal communications within Motiva or between Motiva and its contractors, or electronic mail.

One copy of these documents subject to the document preservation requirements shall be retained during the course of implementing the work under this Agreement and for a minimum of three (3) years after this project has been completed. After this three (3) year period, upon written request of the LDEQ, Motiva shall make available to LDEQ such records or copies of such records, except those which are attorney work-product or subject to the attorney-client privilege.

XIX. OFFICIAL ADDRESSES OF THE PARTIES

Correspondence (including acceptance letters, nonacceptance letters, etc.) and other documents to be submitted pursuant to this Agreement (including Work Plan[s] and report[s]) shall be sent to the following addresses or to such other addresses as Motiva or LDEQ hereafter may designate in writing:

A. On behalf of the LDEQ:

Keith Casanova, Administrator Remediation Services Division Department of Environmental Quality P.O. Box 4314 Baton Rouge, Louisiana 70821-4314

B. On behalf of the Motiva:

Oliver Boyd Environmental Manager Norco Refining P.O. Box 10 Norco, LA 70079

XX. DISPUTE RESOLUTION

If Motiva objects to any LDEQ written notice of nonacceptance or decision made pursuant to this Agreement, Motiva shall notify LDEQ in writing of its objection within twenty-one (21) calendar days of receipt of such notice or decision. LDEQ and Motiva shall then have an additional thirty (30) calendar days from the receipt by LDEQ of the notification of objection to reach an agreement. If an agreement cannot be reached on any issue within this thirty (30) calendar day period (which thirty-day period may be extended by mutual written agreement of the parties), LDEQ shall provide a written statement of its decision by certified mail to Motiva within ten (10) calendar days of the expiration of the period to reach agreement. If Motiva objects to LDEQ's decision, it shall notify LDEQ in writing of its objections within twenty (20) calendar days after receipt of LDEQ's written statement of its decision, exclusive of date of receipt, and may request a hearing with the LDEQ Secretary or his designee. If the request for hearing is granted, the issues raised in the request shall be set for hearing before a hearing officer. The hearing officer will render recommendations to the Secretary or his designee. The final decision by the Secretary or his designee after this hearing is Final Agency Action for the purpose of judicial review. In the event Motiva fails

to object to a LDEQ written notice of nonacceptance or decision made pursuant to this Agreement, Motiva will be bound by such written notice of nonacceptance or decision.

If dispute resolution pursuant to this section is invoked with respect to a particular matter, all other work not directly affected thereby shall proceed according to the agreed upon schedule.

XXI. COVENANT NOT TO SUE

From the time of the effective date of this Agreement until completion of the work agreed to herein, LDEQ shall not institute suit or otherwise pursue claims relating to the work agreed to herein against Motiva unless there is a failure by Motiva to comply with this Agreement or any Work Plan(s) after notice by LDEQ of such noncompliance and failure by Motiva to correct such noncompliance, subject to the provisions of Section XX (DISPUTE RESOLUTION), above. In the event there is a failure to comply with this Agreement or any Work Plan(s), and subject to Section XX (Dispute Resolution), LDEQ may take any action specified in Section XXII (RESERVATION OF RIGHTS).

XXII. RESERVATION OF RIGHTS

Notwithstanding compliance with the terms of this Agreement, Motiva is not released from liability, if any, for any matters outside the scope of this Agreement.

LDEQ reserves the right to take any action or pursue any available remedy pursuant to any legal authority, including the right to seek compliance, injunctive relief, monetary penalties, and punitive damages for any breach of law, regulations, or this Agreement, subject to the provisions of Section XX (DISPUTE RESOLUTION), above

Except as expressly provided in Section XXI (COVENANT NOT TO SUE) of this Agreement, Motiva and LDEQ expressly reserve all rights and defenses that they may have, including LDEQ's right, for good cause shown, both to not accept work performed by Motiva that fails to meet the terms of this Agreement and to request that Motiva perform tasks, in addition to those detailed in the Work Plan(s), that are necessary for the accomplishment of the final remedy for OU-1, as described in the Decision Document and this agreement, or for the RECAP MO-3 evaluation of OU-2, as is detailed in this agreement.

In the event that Motiva declines to perform any reasonable request to perform additional and/or modified tasks, which under Section XX (DISPUTE RESOLUTION) has been determined reasonable, LDEQ reserves the right to undertake any such additional and/or modified task and to seek from Motiva or other responsible parties recovery and/or reimbursement for any costs or expenses incurred in undertaking any such additional and/or modified tasks and any damages, including treble damages, allowed by law.

Motiva reserves all rights that it has or may have to assert claims against persons or entities, for matters arising out of the Site or its operation and ownership, including, but not limited

to, claims for breach of contract, indemnity, contribution, nuisance and claims under federal, state and local laws, subject to the provisions of Section XX (DISPUTE RESOLUTION), above.

XXIII. NO ADMISSION OF LIABILITY

Neither anything contained herein nor participation in this process shall constitute an admission of liability for the violation of any statute, regulation, ordinance or law or responsibility for any activities regarding this Site. Neither this Agreement nor the fact of participation of any party in this process shall be admitted as evidence of any admission or as a declaration against interest by Motiva in any proceeding. This Agreement may be admitted as evidence of its terms in any proceeding instituted by the parties.

It is expressly agreed and stipulated by the parties that this Agreement is entered into in settlement and compromise, in recognition of the potential risks and expense of litigation.

XXIV. SUSPENSION OF PRESCRIPTION

It is expressly agreed and stipulated by the parties that the prescriptive period set forth in R.S. 30:2276(H) is suspended while this Agreement is in effect. The time period while this Agreement is in effect shall not be included in computing the time provided by R.S. 30:2276(H) for any cause of action arising under Chapter 12 of the Environmental Quality Act concerning the Site. The suspension of prescription provided for herein is only effective between the parties hereto.

XXV. PUBLIC PARTICIPATION

Motiva agrees to prepare and submit for LDEQ approval a Public Participation Plan in accordance with LAC 33:VI.803 designed to inform citizens of site plans and activities, as well as provide opportunity for citizen input. Motiva shall be responsible for all Public Participation costs and shall be responsible for implementation of the plan under LDEQ supervision.

XXVI. REIMBURSEMENT OF OVERSIGHT COSTS

LDEQ may employ, arrange for, or contract with a qualified person to perform oversight tasks related to the work performed under this Agreement. Motiva shall bear reasonable and necessary costs, past and ongoing, incurred by LDEQ in connection with this Site and as allowed by law. Such qualified person shall keep accurate books and accounts of oversight costs and at a minimum maintain the following information: who performed the task, what task was performed, date task was performed, cost basis information, and duration of task. Such books and accounts may be audited by Motiva upon written request.

Outstanding oversight costs as of September 30, 2007 are \$1,788.15.

Annually from the date of this signed Agreement LDEQ shall submit to Motiva an invoice for oversight costs incurred by LDEQ with respect to this Agreement. If Motiva disagrees with this invoice on the basis that costs incurred by LDEQ are not reasonable, not necessary or excessive, then Motiva may invoke Section XX (DISPUTE RESOLUTION) of this Agreement. Motiva shall, within thirty (30) calendar days of the invoice date, unless it has invoked Section XX (DISPUTE RESOLUTION) before this 30 day period has passed, remit a check for the amount of those costs made payable to the Louisiana Department of Environmental Quality. Checks shall specifically reference the Site and invoice number, and be mailed to the following address:

Accountant Administrator
Financial Services Division
Office of Management and Finance
Louisiana Department of Environmental Quality
P.O. Box 4303
Baton Rouge, LA 70821-4303

A copy of the check and transmittal letter shall be mailed to:

Cost Recovery Officer
Office of Environmental Assessment
Remediation Services Division
Louisiana Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314

LDEQ reserves the right to bring an action against any responsible party not a participant pursuant to La. R.S. 30:2271 *et seq.* and the Comprehensive Environmental Response, Compensation, and Recovery Act (CERCLA) for recovery of any costs incurred by LDEQ related to this Agreement and not reimbursed by Motiva. LDEQ reserves the right to bring an action against any responsible party pursuant to La. R.S. 30:2271 *et seq.* and CERCLA for recovery of any other past and future costs incurred by LDEQ in connection with activities conducted pursuant to state law or CERCLA at this Site.

XXVII. OTHER CLAIMS

Nothing in this Agreement shall constitute or be construed as a release of or from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or related in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site.

XXVIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to this Agreement shall be undertaken in accordance with requirements of all applicable local, state, and federal laws and regulations

unless an exemption from such requirements is specifically provided in this Agreement. Notwithstanding the foregoing, this Agreement shall be interpreted and construed in accordance with the laws of the State of Louisiana.

XXIX. INDEMNIFICATION OF THE STATE OF LOUISIANA

Motiva agrees to indemnify, save and hold the State of Louisiana, its agencies, departments, agents and employees, harmless from any and all claims or causes of action arising from or on account of acts or omissions of Motiva, its officers, employees, receivers, trustees, agents or assigns, in carrying out the activities and performing work at the Site pursuant to this Agreement. This indemnity does not extend to the liability, if any, of the state or any agency, department, officers, employees, agents, institution or political subdivision thereof as a generator or otherwise under La. R.S. 30:2271 et seq. or any other federal or state law prior to the effective date of this Agreement. This indemnity does not extend to claims or causes of action arising from or on account of acts or omissions of LDEQ, its employees, or contractors, performing work at the Site. This indemnity does not extend to any claims or liability in connection with any citizen suit arising under state or federal law.

LDEQ agrees to indemnify, save and hold Motiva, and its agents and employees, harmless from any and all claims or causes of action arising from or on account of acts or omissions of LDEQ or its employees in carrying out the activities and performing work at the Site pursuant to this Agreement. This indemnity does not extend to the liability, if any, of Motiva as a generator or otherwise under La. R.S. 30:2271 *et seq.* or any other federal or state law prior to the effective date of this Agreement. This indemnity does not extend to claims or causes of action arising from or on account of acts or omissions of Motiva, or its employees, or contractors, performing work at the Site. This indemnity does not extend to any claims or liability in connection with any citizen suit arising under state or federal law.

XXX. EFFECTIVE DATE AND SUBSEQUENT NOTIFICATION

The Agreement may be executed in counterparts, and shall be effective on the date of the final signature.

This Agreement may only be amended by mutual agreement of LDEQ and Motiva. Such amendments shall be in writing and shall have as the effective date, that date on which such amendments are signed by the Secretary of LDEQ or his designee.

No informal advice, guidance, suggestions, or comments by LDEQ regarding reports, plans, specifications, schedules, and any other writing submitted by Motiva will be construed as relieving Motiva of its obligations to obtain such formal acceptance as may be required by this Agreement.

Any reports, plans, specifications, schedules and attachments required by this Agreement are, upon acceptance by LDEQ, incorporated into this Agreement.

XXXI. FORCE MAJEURE

Motiva shall be excused from performing the activities called for in the Work Plan(s), within the time limits and in the manner specified in the schedules included in the Work Plan(s), if such performance is prevented or delayed by circumstances which constitute force majeure. For purposes of this Agreement, force majeure is any circumstance including weather, acts of God, and other circumstances arising from causes beyond Motiva's reasonable control despite Motiva's due diligence and good faith efforts. The Parties agree that force majeure includes, among other circumstances, the issuance of any final permits necessary to perform the work, provided that Motiva submitted timely and complete permit applications. In the event of force majeure, the time for performance of any activity delayed by the force majeure event and the time for performance of any activity dependent upon the delayed activity shall be similarly extended.

Motiva shall notify LDEQ in writing as soon as reasonably possible but not later than fifteen (15) calendar days after Motiva becomes aware of a circumstance that may delay or prevent (or has delayed or prevented) performance of any activity under the Work Plan(s). The notice shall state the cause and anticipated length of the delay, the measures taken by Motiva to prevent or minimize such delay, and a timetable outlining when such measures were or will be taken.

If the parties do not agree as to whether or not the event(s) constitute(s) *force majeure*, the dispute shall be resolved in accordance with the provisions of Section XX (DISPUTE RESOLUTION).

XXXII. TERMINATION AND SATISFACTION

This Agreement shall be deemed satisfied and terminated upon Motiva's receipt of written notice from LDEQ that Motiva has demonstrated to the satisfaction of LDEQ that all of the tasks of this Agreement, including any additional tasks which Motiva has agreed to be necessary, have been completed. If the work has been completed to the satisfaction of LDEQ then LDEQ shall issue an appropriate written notice of satisfaction and termination of this Agreement not later than sixty (60) calendar days after completion of all tasks under this Agreement.

XXXIII. SUPERSECESSION OF ORDER OF JANUARY 11, 1989

This Cooperative Agreement supersedes the Demand for Remedial Action, In the Matter of Shell Oil Company, NORCO Refinery, Department of Environmental Quality, January 11, 1989, only to the extent that said Demand requires a remedial investigation and feasibility study for the areas included in OU-1, and a remedial investigation for the areas included in OU-2.

XXXIV. PARTIES BOUND

Any person's signature to the attached "Signature Page to the Cooperative Agreement" shall constitute an agreement by that person, or as agent for a principal, to be bound by the terms and conditions of this Agreement. Any person may, before or after the effective date of this Agreement, agree to be bound by this Agreement.

This Agreement shall apply to and be binding upon Motiva and LDEQ, their agents, successors and assigns and upon all persons, contractors, and consultants acting under, or for Motiva or LDEQ.

No change in ownership of the Site or change in corporate or partnership status will in any way alter the status of Motiva or in any way alter Motiva's responsibility under this Agreement.

IT IS SO AGREED AND ORDERED:	
BY: Louis E. Buatt Assistant Secretary Office of Environmental Assessment Department of Environmental Quality	_
WITNESSES:	_
	D, before me, the undersigned Notary Public, in the day of
Notary P	Public (Signature)
Notary	Public (Printed)
Notary	y or Bar Roll #

COOPERATIVE AGREEMENT FOR SITE INVESTIGATION AND REMEDIATION

BETWEEN THE STATE OF LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AND

MOTIVA ENTERPRISES LLC

IN THE MATTER OF

THE BAYOU TREPAGNIER SITE

AI # 44765

Know all persons that the undersigned hereby consents and agrees to be bound by the terms of this Cooperative Agreement, to which this signature page is made a part.

Motiva Enterprises LL	
Ву:	
(Signat	ire)
(Printed)
Title:	
WITNESSES:	
	AND SUBSCRIBED, before me, the undersigned Notary Public, in ve-named witnesses, on the day of,
	Notary Public (Signature)
	Notary Public (Printed)
	Notary or Bar Roll #